

Part Number: KPA-3210SURCK

Hyper Red

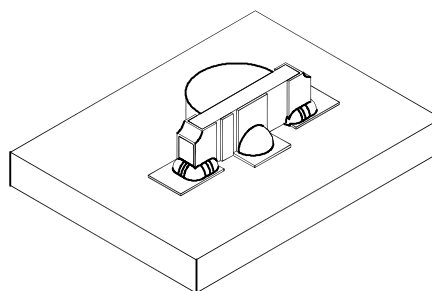
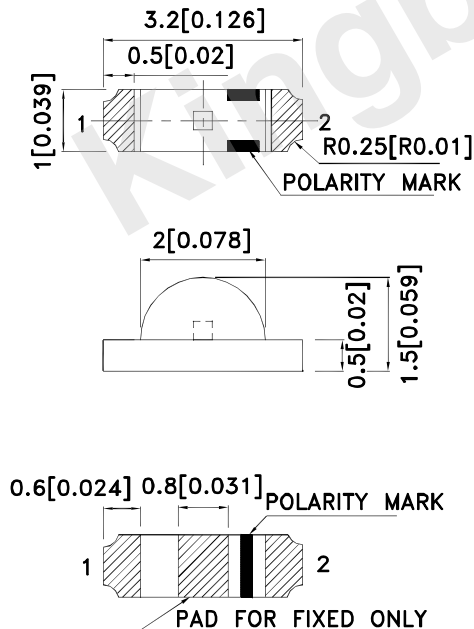
### Features

- 3.2mmx1.0mm right angle SMT LED, 1.5mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

### Description

The Hyper Red source color devices are made with Al-GaN on GaAs substrate Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1$  (0.004") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KPA-3210SURCK	Hyper Red (AlGaInP)	Water Clear	120	220	120°
			*40	*80	

### Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
- \* Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Hyper Red	645		nm	I <sub>F</sub> =20mA
λ <sub>D</sub> [1]	Dominant Wavelength	Hyper Red	630		nm	I <sub>F</sub> =20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	28		nm	I <sub>F</sub> =20mA
C	Capacitance	Hyper Red	35		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Hyper Red	1.95	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Hyper Red		10	uA	V <sub>R</sub> =5V

### Notes:

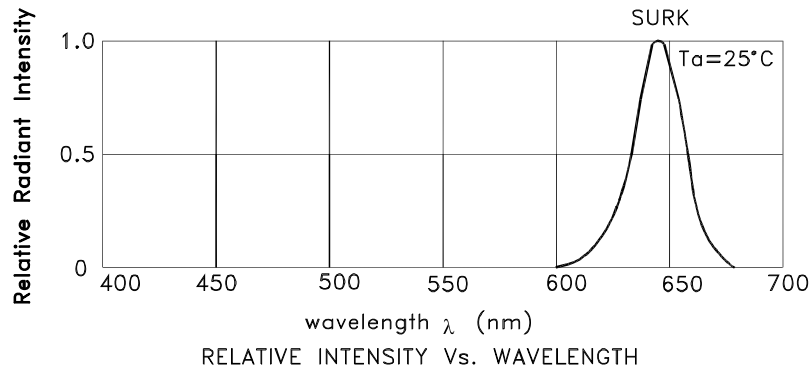
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
- 3.Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

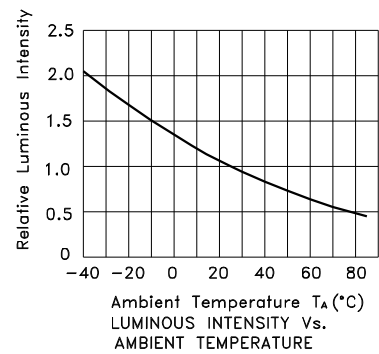
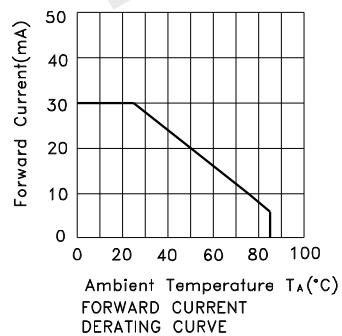
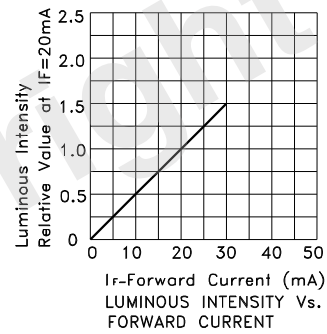
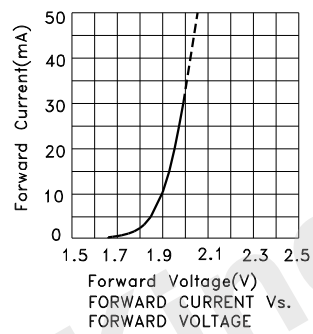
### Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



## Hyper Red

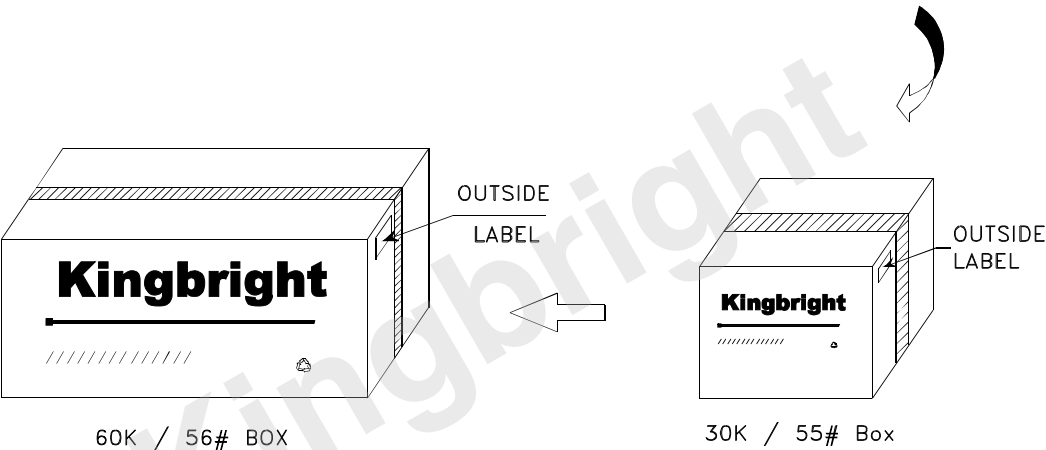
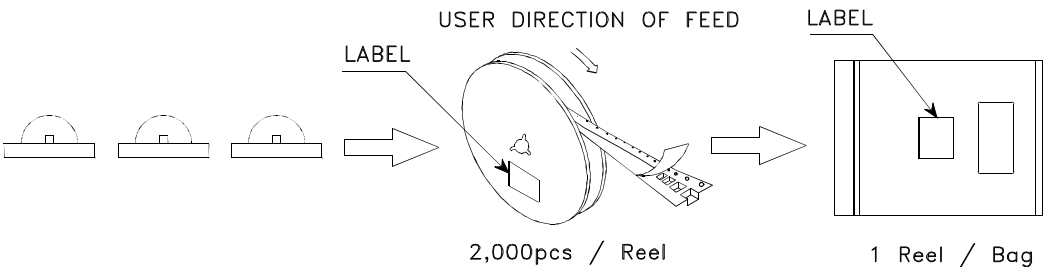
### KPA-3210SURCK






## PACKING & LABEL SPECIFICATIONS

KPA-3210SURCK



<b>Kingbright</b>		
P/NO: KPA-3210xxx		
QTY: 2,000 pcs	Q.C.	Q C XX XX XXXX PASSED
S/N: XXXX		
CODE: XXX		
LOT NO:  xxxxxxxxxxxxxxxxxxxxxxxxxxxx		
RoHS Compliant		

Detailed application notes are listed on our website.  
[http://www.kingbright.com/application\\_notes](http://www.kingbright.com/application_notes)